

In recent decades, the trend or the need for an experience of the effect of immersion into theatre events, other branches of art, tourism, everyday business and private life has become quite evident. We are used to audio-visual communication, which, from the Renaissance onwards, became the dominant channel for delivering messages, while other senses became less important.

Until the middle of the 20<sup>th</sup> century, the role of smell in theatre practices was neglected, and more important senses took over the place of communication and staging. Rarely it was used as a direct prop, but always very carefully, because, according to many experts, it cannot be controlled like sound and light. However, we have forgotten that the smell, especially in combination with the sound, can have a strong emotional impact on a spectator. Like the other senses, the scent recreates the context of memories and can evoke an intense reliving of emotions and events. It can also provoke an evaluation or re-evaluation of the past, thereby affecting the perception of the present. Reality is perceived through the adaptation of sensory information, which is shaped and interpreted under the influence of past experiences. Experiences create expectations, and expectations create our subjective reality considering everyday life and theatrical performance. This relationship is especially noticeable in sensorial theatre.

In the last decade, an effort has been made to bring scents and other tools of sensorial theatre back to the stage, just as – according to foreign sources – they were an important part of events in antiquity. In this way, the stage can be enriched with an additional dimension of communication and expression. The paper presents various methods and experiments on the use of scent and other tools of sensorial theatre, evaluating their phenomenology and effectiveness from the perspective of the performing arts and psychological science.

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**Keywords:** sensorial theatre, perception of reality, psychological immersion, smell, memories

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# The Art of Immersion with Smell and Sensorial Theatre Language

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## Introduction

Barbara Pia Jenič joined the Teatro de los Sentidos (hereinafter TDLS) in 1996. Initially from Colombia, stationed in Spain and the first such theatre globally, it is a theatre of senses and experiences in which the visitor travels through the rooms. Actors/inhabitants guide the visitor through the event's different scenes and involve him in sensory experience individually, interactively. As an actress in this theatre, Jenič was also responsible for designing the scents. She has collaborated with TDLS in more than three hundred performances at various European theatre festivals and other venues. Therefore, she designed scents for up to twenty characters and twenty-five different scenes per show. She has been researching scents since 1999, later also within her Slovenia-based theatre structure, Sensorium.

In Sensorium's performances until 2005, she initially repeated the learnt staging concept (according to the TDLS), that is, labyrinths made of fabric, through which the visitor passed in semi-darkness from scene to scene. The theatre curtains' texture absorbed the prepared scents well, which persisted in the dark and narrow spaces for several hours. The scents deepened the individual experience, elicited visitors' emotions and greatly influenced their well-being. Some visitors<sup>1</sup> were evoked by forgotten memories or deep, sometimes undefined feelings and emotions that were sometimes difficult to control.

Due to the 2008 economic crisis and the consequent reduction of financial resources, the conditions for scenography, long-term rental of staging scenes and the implementation concept (which enabled the experience of intense odours) changed and deteriorated. The construction of labyrinths of cloth was abandoned, the individual relationship between the player and the visitor became public, and the application of scents required new solutions.

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<sup>1</sup>Visitors' statements are documented in the form of handwritten comments, kept by the Teatro de los Sentidos.

Due to the changes affecting sensorial theatre, questions arose, such as how to maintain a personal relationship between the visitor and the actor and the effect of immersion in an open space; and how to achieve the immersion with the use of odours in a contemporary theatre performance. Before answering these questions, it may be essential to make sense of a sensory theatre experience. Not from the point of view of artistic or philosophical experiential subjectivity, but that of contemporary science. Is it possible to justify or explain the phenomenon of sensory theatre by scientific findings? Are there explanatory connections between sensory theatre and science? First, let us explain psychological immersion in theatrical performance from the perspective of science.

## Psychological immersion in the theatrical performance

Research about psychological immersion in a simulated environment or fictional world is far from being scarce. However, the authors of this essay were unable to find any empirical or experimental studies of immersion related to sensorial theatre. The theme appears neglected in scientific research. Yet, some assumptions and insights into immersion in theatrical performance can be drawn from a close reading of the existing literature that deals with sensory and mental immersion in virtual reality.

Immersion is generally regarded as the experience of losing oneself in the artificial environment or fictional world while narrowing attention away from stimuli coming from the immediate physical outside world (Fox et al. 95–113; Schubert 161–187) of which awareness may even vanish. Immersion may be sensory or mental. Sensory immersion can be defined as the presence in virtual reality (Cummings et al. 272–309), where perception is the primary cognitive process that influences the level of immersion. When a person is immersed in virtual reality, perception prevails, and imagination is expected to be reduced; otherwise, the sense of immersion fades. The intensity of immersion may be manipulated by stimulating perception to achieve the feeling of presence. The more exhaustive the virtual reality is, the greater the sense of presence.

Mental immersion is often explained as transportation or engagement into narratives, which may be found in books, sounds, music, movies, smells or other audio-visual material (Green and Donahue 241–256; Speidel 173–194). Transportation is cognitive and emotional absorption into a narrative, focusing mental (cognitive) abilities on the narrative's plot or events (Greenwood and Long 637–654). Thus, it may be defined as a form of mental simulation of narrative possibilities (Green and Donahue 241–256). Narratives, such as in music, are used to alter and maintain our emotional states (Mar et al. 818–833, Juslin 131–140). Generally, explanations of narratives can induce the sense

of immersion in a fictional world that is predominately produced by internal cognitive processes or abilities to create an imagined world by symbolic representations (Mangen 404–419). Here, imagination is more important than perception, and attentional focus has to be maintained within imagination; otherwise, the sense of immersion is lost. The more possibilities a narrative offers, or the less elaborated or detailed it is, the more it stimulates the imagination. This leads to a more intense transfer into a narrative and to a more intense immersion (Green and Donahue 241–56), which is associated with heightened arousal and more intense emotions due to an experience of “proximity” (Lang et al. 97–135, Visch et al. 1439–1445).

In sensorial theatre, we can experience both types of immersion. One could even say that perhaps sensorial immersion is a hallmark and the original essence of sensorial theatre. First, it offers a novel experience that is quite different from an everyday one and subjective interpretation. The meaning of such an experience may be rationalised later, perhaps even after the end of a performance. In classical sensorial theatre, like in virtual reality, perception might prevail over imagination, which should be reduced; otherwise, immersion fades, and an important goal of the performance might be lost. When a narrative is involved in a sensorial performance, then mental immersion can also be experienced. However, with the narrative used, attention may be focused mainly on its plot, and sensorial impressions may be secondary or even neglected. Thus, a sensorial performance with a narrative is expected to be more challenging for performance creators. To achieve a performance’s goals, its creators must efficiently balance sensorial and mental immersion or create a balance between sensorial experiences and transportation into a narrative.

## Vision as a dominant sense in theatre

Vision is often considered as the dominant, most essential and complex sense. The idea of visual dominance can be traced back to ancient Greece when Plato assigned divinity to vision and considered it as the higher sense along with audition. In contrast, other senses were less rational and more subjective lower senses bound to bodily reactions (Schellekens 734–743, Jütte and Lynn 61). Similarly, Aristotle ranked senses by putting vision first and then the other senses in the following order: hearing, smell, taste and touch (Jütte and Lynn 61). In the centuries that followed, vision was consistently rated as the highest sense in Western societies (Hutmacher 2246). Therefore, philosophical influences seem possible but not the only reason for visual dominance.

A shift from oral/auditory to written/visual transfer of information is evident through history. Centuries ago, books were scarce, very few people were literate, knowledge

was mostly transmitted orally. Even contracts were mostly agreed upon verbally and not written; agreements were stored predominately in the verbal memories of those committed or interested. Then in the 15<sup>th</sup> century, the Gutenberg printing revolution happened. With printed books and other press, vision has become much more important in attaining information. There was a shift from hearing to sight, which became even more emphasised in the digital revolution in the latter half of the 20<sup>th</sup> century.

A similar shift may be perceived in the assigned importance of smell as well. Before modern history, more precisely before the 18<sup>th</sup> century, a pleasant smell was often strongly related to essence and spiritual truth and medical power. Meanwhile, the sight was often lowered to be superficial, revealing only exterior features of reality and having no such potency as assigned to good smells (Classen 96). Contrary, stench or putrid odour was associated with illness and evil dark forces (Muchembled and Pickford 90). Later in the 19<sup>th</sup> century, the belief in scents' healing power faded away (Classen 40). The importance of smell became discounted by ideas such as Paul Broca's belief that the evolution of free will required a reduction in the size of the brain's olfactory bulb or the religious politics of the Catholic Church, which opposed the early scientific endeavour. Consequently, the myth that humans have a poor sense of smell was born (McGann 7263), and sight gained importance.

In Western societies, a gradual rise of ideas related to the importance of sight might also be transferred into language. For example, when average frequencies of words per modality are examined in the English language, the frequency of visual words clearly prevails over words of other senses (Winter et al. 213–220). It appears that the origin of the dominance of sight can be explained by cultural/historical influences and by biological predispositions since people generally and foremost talk about their visual experiences and afterwards about what they hear, smell, taste and feel (San Roque et al. 31–60). However, the hierarchy of human senses – sight, hearing, touch, taste and smell – is not a universal reality across cultures. Cultures that place exceptional value on their musical heritage can more efficiently describe sounds; those involved in patterned pottery can communicate about shapes. Still, generally, people of all cultures find that smell is the most difficult to communicate (Majid et al. 11369–11376).

The occurrence of photography, cinema, television, computers and smartphones slowly led to modern life taking place on screens. The everyday human experience is now more visual than ever before in history (Bekkers and Moody 189). Visual dominance has probably also shaped scientific research of human perception. In past decades, research on perception has been heavily focused on visual perception, neglecting other sensory modalities. This trend even seems accelerated in recent years (Hutmacher 2246), perhaps primarily by the development of digital technology,

which creates the visual reality in which we live.

The added value of sensorial theatre is that it presents theatrical themes significantly different from what we are used to and offers participants a very different experience of reality. We are accustomed to visual images; we are so overwhelmed by them in our everyday lives that we often have difficulty differentiating the important from the less important. A remarkable turnaround happens in sensorial theatre. The flow of visual reality is suddenly muffled or even turned off. As the brain fills in the gaps caused by sensory deprivation, the often overlooked flow of auditory, tactile and olfactory reality is activated. The everyday visual reality disappears, and a new sensory experience turns up. Non-visual experiences overwhelm us just like the previous visual experiences.

## Memories triggered by smells

It seems that conscious odour perception is not as crucial as vision or hearing, which are important communication channels. Namely, complete anosmia is often unnoticed, which is not the case in vision or hearing. Odours may have strong emotional and behavioural effects, such as attraction or repulsion. However, most well-known and expected odours are not consciously observed and may only provide a sense of safety. Only new and unexpected odours that do not fit memory-based expectations are consciously remarked. In humans, olfactory memory helps to neglect known odours and react to unexpected or unknown ones. Thus, the memory of odour perception is most probably related to the warning system, which prevents the intake of possible harmful gasses and foods (Köster and Degel 9–11). Research shows that odours were not meant to be identified and embodied. For example, in perfume making, it is well known that most ingredients, such as musk, lose their effectiveness in a mixture if their concentration is so high that they can be noticed as a component (Ibid. 9). It appears that perception of odours is not intended to label them but rather unconsciously monitor our environment. It also allows us, as some kind of side effect, to recall distant memories.

The long-term autobiographical memory, as a part of episodic memory, enables humans to re-experience specific personal events from the past that are associated with feelings of mental time travel, a sense of self, awareness of the past and also reflections on past behaviour and feelings (Tulving 1–25). Among all senses, odours seem to trigger the most emotional and vivid memories. This finding may be associated with the observation that smell is a privileged sense for accessing memories since it has a substantial anatomical connection with memory structures (Saive et al. 240). While in early research, memories of odours are very stable over time, more recent research contradicts such belief (Olsson et al. 161–71). However,

humans can accurately recognise odours (Herz and Engen 300–313), but recognition performance heavily depends on context. The more odours we sense simultaneously, and the more similar they are, the lower the recognition accuracy (Schab 242–251).

Further, odours are better recognised and memorised after elaborative cognitive processing, such as thinking of odours and situations, particularly after receiving information about the odour source or nature (Frank et al. 29–41). Odour-evoked memories are associated with stronger sensations of being brought back in time (Arshamian et al. 123–131). Still, we tend to talk and think less about them than memories recalled by visual or verbal stimuli (Rubin et al. 493).

The reminiscence bump of autobiographical memory reflects reports of memories from ten to thirty years of age that would usually be forgotten (Koppel and Berntsen 66–80). While pictures, sounds or words reproduce reminiscence bumps in adolescence and early adulthood, odours frequently recall memories from childhood, precisely from the first decade of life (Hackländer et al. 401–429). The late finding is expected in the so-called Proust phenomenon (Chu and Downes 111–116) and the discovery that odours evoke more vivid, emotional and rarer memories than those recalled by other sensorial stimuli (Larsson et al. 312). This phenomenon is not well explained and researched; therefore, some controversies exist, such as doubts that odour-evoked memories are more vivid than others and the most effective cues for triggering autobiographical memories (Herz 95–114). Namely, recent research offers only weak support for the assumption that odour-evoked memories are notably vivid (Hackländer et al. 401–429).

In most cases, it was suggested that the olfactory memory bump might be associated with unique characteristics of the olfactory sense. Unlike other sensory systems, the olfactory system in mammals is part of the limbic system and has direct neural projection to the amygdala. It is closely related to the hippocampal regions, and it lacks a thalamic relay between initial core structures and the primary sensory cortex (Wilson and Stevenson 40). Accordingly, olfaction is a sense of first impressions, which allows first odour-to-object and not sound-to-object associations to be formed; therefore, earliest life experiences might be favoured over experiences of other senses (Yeshurun et al. 1869–74). But this is not the only possible explanation why odours may provoke specific memories. We are consciously aware mostly of novel odours but not of those already experienced. Odours are not easily noticed after the first experience. Therefore, the first memorised impressions associated with odours are not replaced by later events involving the same odours. This reason might be why we experience the bump into long-term childhood memories (Köster and Degel 10). Yet, recall of odour-evoked memories is relatively rare because odours might be more specific than other sensorial information and thus match fewer mental representations, which probably explains the

rarity of odour-evoked memories (Larsson et al. 312).

The beliefs that odours influence human behaviour and implicit memory are widely accepted, despite the lack of scientific proof, most evident in aromatherapy (Degel and Köster 317). Nevertheless, odours may still be welcome in sensorial theatre since people often respond to them as expected by performance creators. There is no reason to wait for answers science will bring. People do not need science to enjoy theatre. Beliefs, emotions and sensory experiences are often more powerful, inspiring and lasting essence of life than scientific findings.

## Recent developments in sensorial theatre

At the end of the introduction to the essay, the question was raised on how to achieve the effects of sensory language and immersion with odours in a modern stage performance. Several different performing procedures may lead to answers:

### 1. *Open spaces, an audience with blindfolds*

To achieve the effects of odours in labyrinths, Jenič changed the external labyrinths into internal ones. She decided to put blindfolds on the eyes of participants, thus eliminating the predominant power of vision. Odour perception in such forms depends on the method of application to the atmosphere and the stage elements. Jenič used this method in several sensory performances.<sup>2</sup> According to her observations, visitors perceived sensory impulses in the following order: when vision is switched off, touch becomes the essential sense, followed by sound, smell and taste. Interestingly, according to these experiences, it may be inferred that the hierarchy of senses, such as sight, hearing, smell, taste, touch, as assumed by Aristotle (Jütte and Lynn 61), may not be valid in the context of the sensorial theatre. It would be interesting to examine this hypothetical hierarchy of senses. Perhaps future discoveries can offer new possibilities and more in-depth experiences for participants of sensorial performances.

### 2. *Odours as an invisible part of visual art*

With the visual installation of *Sensorial soundscapes* at MGLC<sup>3</sup> in 2014, Jenič studied the influence of smell and sound on visible sensing and perception. Visitors smelled

<sup>2</sup> *Being or Having* [Biti ali imeti] (2005), *Unveiling* [Odstiranje] (2006), *In vino veritas?* (2008), *Waterman* [Povodni mož] (2013), *Smells of Emona* [Vonjave Emone] (2014), *Hotel Tivoli between Memories and Dreams* [Hotel Tivoli med spomini in sanjami] (2018), *Divine Comedy* [Božanska komedija] (2019).

<sup>3</sup> International Centre of Graphic Arts, Ljubljana.

different odours and listened to different sounds while observing the exhibited graphic images. The public wrote down the contents of the observed graphic works on the prepared forms, combining different sounds and smells.<sup>4</sup> The exhibition confirmed the assumptions that sound and smell affect the way the visual target is perceived. This effect was also noticed in the project *Future Promise Park* (2017) by Korean artist Moon Kyungwoon who presented her video installation at the 32<sup>nd</sup> International Biennial of Graphic Arts at MGLC. The artist created an invisible part of the park in the form of scents. The findings that odours may influence visual perception have further motivated Jenič to use smells in stage performances.

### 3. The invisible part of auditory presentations

The project *Lalabajke*, first presented in 2011 as part of the international *Generosity project*, combines a narrative, sound and smells. When reading the story in semi-darkness, the listener does not see the reader and focuses on the sound and smells, as he is not occupied with visual impressions. Some<sup>5</sup> visitors completed a survey<sup>6</sup> on the impact of scents on their immersion into the story. Among fifteen participants, 80% of them answered that smell has a positive effect on the event. Approximately 90% said that semi-darkness deepens the experience of smells. Half of them answered that the smells were most influential when asked how strongly they experienced immersion in the story. At the same time, about 85% responded that the darkness mainly influenced the immersion, then the story itself and the narrator's voice. More than 70% of them thought that the smell created the story's atmosphere. Almost 90% of the visitors agreed that smells could be more common in the theatre and when presenting stories. Due to the small number of participants, further research is needed to generalise these findings.

### 4. Theatre performances

As suggested by Erica Fisher-Lichte (192), the use of smell is a rarely discussed element in performances. She is surprised at how little attention has been paid to theatre scents so far, as "odour is undoubtedly one of the most powerful effective components of the atmosphere" (Ibid. 194).

The historical importance of odours in public events is evident in many sources of

<sup>4</sup> The exhibition at MGLC was set up one year before London's *Tate Sensorium* won the 2015 IK PRIZE.

<sup>5</sup> Those who consented to the survey left their email address and answered all the questions.

<sup>6</sup> The survey was completed by visitors of *Lalabajke* on 14 May 2016 and 21 April 2017 at the Trubar House of Literature. It was of a pilot nature, so it would be good to do more extensive research on this topic with a larger number of participants and over an even longer period of time.

literature, such as:

The beginnings of Western theatre in ancient Greek festivals like the *Eleusinian* mysteries (in modern times considered the *prototype* of the modern Gesamtkunstwerk) were suffused with intense aromas of all kinds: including fruit, floral, grain, and animal offerings; blood and burning animal flesh; wine, honey, and oil libations; and the *burning* of incense and other material in sacred fires (Burkert 1985). In our times, the use of incense in Catholic *churches constitutes* a diminished survival of the ritual use of smell in religious performances. Scented theatre programs and perfume fountains were only two of the *nineteenth-century* olfactory devices in *Western* theatres (Hail 1987), but during most of the *twentieth* century, the “fourth wall conventions of realism generally divided the *spectator* from the *mainstream* stage and permitted only sight and sound to cross its divide (Banes and Lepecki 29).

In ancient times, various odours were used for sporting events and artistic performances to scent both actors and audiences (Classen 26). For example, the scent of saffron was often used for the audience. Its effects have not yet been researched, but interestingly, they are mentioned on some online sources as very soothing, even narcotic (CaFleureBon). Therefore, it could be assumed that with saffron and other scents, the organisers have tried to induce the well-being of the audience and the perception of the event. “Putting on a good show in antiquity, therefore, involved putting out a good scent” (Classen 26).

Fischer-Lichte also states that the smell in theatre is difficult to control, as it cannot be turned on and off like sound and light (192). However, it can still be used, as Barbara Pia Jenič has proven through her performative experiments over the last decade. Barbara Pia Jenič first tried using scents on stage in 2009 in performances *Evening with Mila Kačič* (Večer z Milo Kačič, 2009–2011), *You Find Me in Everything* (V vsem me najdeš, 2012), *Cro Magnon* (2013), *Gothic Windows* (Gotska okna, 2014). In these cases, a one-time spray of scents around the audience and stage was applied. Due to strong audio-visual impressions, the audience was not aware of the smells. Most of them had not perceived or commented on them, which led the author to conclude that it is necessary to change the methodology of introducing scents to the stage, perhaps to weave the scent into a more appropriate context and give it time and space to develop and spread.

## 5. Opera

In 2015, fragrances were presented in Svetlana Makarovič’s operarium *The Tenth Daughter* (Deseta hči) at the SNG Opera and Ballet in Ljubljana. Smells were also noticed by the critic of the newspaper *Delo*, Borut Smrekar, but not to the extent and

scope as Jenič expected. Criticism also proves that smells, as Fischer-Lichte states, are always present in the theatre by themselves.

## 6. Drama theatre

In the performance *The Wonderful New World* (Krasni novi svet) by Barbara Pia Jenič inspired by Aldous Huxley in SNG Drama (2017), scent was sprayed on the audience in the substantive context of the clones' conditioning. The audience perceived the context in the desired way and also accepted it with affection, but the critics did not attach any importance to this novelty. In 2018, a scent was used for the first time at Prešeren Theatre Kranj using the method of sensorial theatre language in the performance of Kahlil Gibran's *The Prophet* (Prerok). The scents were thoughtfully directed, dressed in context and applied so that their time and space could resonate. As critic Ivana Zajc wrote, "the show melts in the body" (11). Gregor Butala described it as "a fusion of the textual and the sensory into a harmonious, complementary entity" (Butala). These reviews may indicate that the purpose of odours, as described in the introductory part of this paper, was achieved. The same sensory procedures for applying scents were used in the performance *Scented Secrets* (Dišeče skrivnosti)<sup>7</sup>, allowing a complete immersion into what is happening on stage, as was the custom in antiquity.

## Conclusion

Sensory experiences represent only a partial source of the overwhelming feelings induced by a sensorial performance. It may well be that another essential source of excitement and personal immersion comes from overcoming anxiety. In sensorial performance, a participating audience member may blindly surrender to an unknown person, leading them through a novel experience almost without visible information. Thus, the participating audience gives up much of their control over reality. As members of the participating audience, we give up the comfort of the situation's predictability. We dare to do what we otherwise avoid because we fear unpleasant or painful consequences. In a sensorial performance, we are suddenly in control of what usually controls us – anxiety. And that is not all the magic. Despite surrender, nothing terrible happens, quite the opposite; we are safely taken into the unknown, and we come out of it with a different, albeit short-lived, awareness of our existence. We have experienced a different reality that can be seen as life encouragement coming from overcoming anxiety. Even the reality of dreams cannot be as relaxing and pervasive as the reality of sensory performance.

<sup>7</sup> Performance at the Slovene Permanent Theatre in Trieste, co-production Sensorium and UL AGRFT, première in October 2021.

In sensorial performance, the impact of smell on participants' experience may be noticeable and a key factor that directs quality and depth of experience. Smell perception is weaker or insignificant for visitors when they receive visual information with their eyes open. The only exceptions are extremely strong negative or positive odours. Scents applied thoughtfully can significantly contribute to the more profound understanding of individual experiences, images, spaces and situations. The use of scents in theatre and art can open up new possibilities for presentation and delve into events. The scent creates an atmosphere, opens up the inner imagination and emotions of the audience. Therefore, if we know how to use it properly, the scent can sharpen and deepen the immersion into theatrical performance. The hierarchies of perceptions or senses in theatre deserve more attention and additional research that could show the significance of the role and power of thoughtfully used sensorial experiences in theatre.

- Arshamian, Artin, et al. "The Functional Neuroanatomy Of Odor Evoked Autobiographical Memories Cued By Odors And Words". *Neuropsychologia*, vol. 51, no. 1, 2013, pp. 123–131. Elsevier BV, doi:10.1016/j.neuropsychologia.2012.10.023.
- Banes, Sally, and André Lepecki. *The Senses in Performance*. Routledge, 2007.
- Bekkers, Victor, and Rebecca Moody. *Visual Culture and Public Policy*. Routledge, 2015.
- Butala, Gregor. "Kritika predstave Prerok: Premišljeno zlitje elementov". *Dnevnik*, 30 November 2018, <https://www.dnevnik.si/1042848581/kultura/oder/kritika-predstave-prerok-premisljeno-zlitje-elementov>. Accessed on 14 April 2021.
- CaFleureBon. "Golden Threads Of Spice". *CaFleureBon*, 30 March 2014, <https://www.cafleurebon.com/cafleurebon-saffron-in-perfumery-golden-threads-of-spice-best-saffron-perfumes/>. Accessed on 12 April 2021.
- Chu, Simon, and John J. Downes. "Odour-Evoked Autobiographical Memories: Psychological Investigations of Proustian Phenomena". *Chemical Senses*, vol. 25, no. 1, 2000, pp. 111–16, doi:10.1093/chemse/25.1.111.
- Classen, Constance. *Worlds of Sense: Exploring the Senses in History and across Cultures*. Routledge, 1993.
- Cummings, James J., and Jeremy N. Bailenson. "How Immersive Is Enough? A Meta-Analysis of the Effect of Immersive Technology on User Presence." *Media Psychology*, vol. 19, no. 2, 2015, pp. 272–309. *Crossref*, doi:10.1080/15213269.2015.1015740.
- Degel, Joachim, and Egon Peter Köster. "Odors: Implicit Memory and Performance Effects." *Chemical Senses*, vol. 24, no. 3, 1999, pp. 317–25, doi:10.1093/chemse/24.3.317.
- Fischer-Lichte, Erika. *Estetika performativnega*. Študentska založba, 2008.
- Fox, Jesse, et al. "Virtual Reality. A Survival Guide for the Social Scientist." *Journal of Media Psychology*, vol. 21, no. 3, 2009, pp. 95–113. *Crossref*, doi:10.1027/1864-1105.21.3.95.
- Frank, Robert A., et al. "Odor Recognition Memory as a Function of Odor-Naming Performance." *Chemical Senses*, vol. 36, no. 1, 2010, pp. 29–41. *Crossref*, doi:10.1093/chemse/bjq095.
- Gibran, Kahlil. *Prerok*. Založba Emka, 2018.
- Green, Melanie C. and John K. Donahue. "16 Simulated Worlds: Transportation Into Narratives." *Handbook of Imagination and Mental Simulation*, edited by Keith D. Markman et al., Psychology Press, 2012, pp. 241–256. <https://doi:10.4324/9780203809846.ch16>.
- Greenwood, Dara N., and Christopher R. Long. "Psychological Predictors of Media Involvement." *Communication Research*, vol. 36, no. 5, 2009, pp. 637–54. *Crossref*,

doi:10.1177/0093650209338906.

- Hackländer, Ryan P. M., et al. "An In-Depth Review of the Methods, Findings, and Theories Associated with Odor-Evoked Autobiographical Memory." *Psychonomic Bulletin & Review*, vol. 26, no. 2, 2019, pp. 401–29. *Crossref*, doi:10.3758/s13423-018-1545-3.
- Herz, Rachel S. "Odor Memory and the Special Role of Associative Learning." *Olfactory Cognition: From Perception and Memory to Environmental Odours and Neuroscience*, edited by Gesualdo M. Zucco et al., John Benjamins, 2012, pp. 95–114.
- Herz, Rachel S., and Trygg Engen. "Odor Memory: Review and Analysis." *Psychonomic Bulletin & Review*, vol. 3, no. 3, 1996, pp. 300–13. *Crossref*, doi:10.3758/bf03210754.
- Hupka, Ralph B., et al. "The Colors of Anger, Envy, Fear, and Jealousy." *Journal of Cross-Cultural Psychology*, vol. 28, no. 2, 1997, pp. 156–71. *Crossref*, doi:10.1177/0022022197282002.
- Hutmacher, Fabian. "Why Is There So Much More Research on Vision Than on Any Other Sensory Modality?" *Frontiers in Psychology*, vol. 10, no. 2246, 2019. *Crossref*, doi:10.3389/fpsyg.2019.02246.
- Jenič, Barbara Pia. "Senzorialne zvočne pokrajine" *Senzorium*, 7 July 2014, <http://www.senzorium.com/oPredstavi.php?predstava=31>. Accessed on 12 April 2021.
- Jonauskaite, Domicile, et al. "The sun is no fun without rain: Physical environments affect how we feel about yellow across 55 countries." *Journal of Environmental Psychology*, vol. 66, 2019. <https://doi:10.1016/j.jenvp.2019.101350>.
- Jonauskaite, Domicile, et al. "Universal Patterns in Color-Emotion Associations Are Further Shaped by Linguistic and Geographic Proximity." *Psychological Science*, vol. 31, no. 10, 2020, pp. 1245–60. *Crossref*, doi:10.1177/0956797620948810.
- Jonauskaite, Domicile, Jörg Wicker, et al. "A Machine Learning Approach to Quantify the Specificity of Colour–Emotion Associations and Their Cultural Differences." *Royal Society Open Science*, vol. 6, no. 9, 2019, *Crossref*, doi:10.1098/rsos.190741.
- Juslin, Patrik N. "Emotional Responses to Music." *Oxford handbook of music psychology*, edited by Susan Hallam et al., Oxford University Press, 2009, pp. 131–140.
- Jütte, Robert, and James Lynn. *A History of the Senses: From Antiquity to Cyberspace*. Polity, 2004.
- Koppel, Jonathan, and Dorthe Berntsen. "The Peaks of Life: The Differential Temporal Locations of the Reminiscence Bump across Disparate Cueing Methods." *Journal of Applied Research in Memory and Cognition*, vol. 4, no. 1, 2015, pp. 66–80. *Crossref*, doi:10.1016/j.jarmac.2014.11.004.
- Köster, Egon, P. and Joachim Degel. "Are weak odors stronger than strong odors? The influence of odor on human performance." *Aroma-Chology*, vol. 9, no. 2, 2001, pp. 9–11.

- Kyungwon, Moon, "https://promise-park.ycam.jp/en/overview-of-the-promise-park-project/" Accessed on 12 April 2021.
- Lang, Peter J., et al. "Motivated Attention: Affect, Activation, and Action." *Attention and Orienting*, edited by Peter. J. Lang et al., Lawrence Erlbaum Associates, 1997, pp. 97–135.
- Larsson, Maria, et al. "Olfactory LOVER: Behavioral and Neural Correlates of Autobiographical Odor Memory." *Frontiers in Psychology*, vol. 5, 312, 2014. *Crossref*, doi:10.3389/fpsyg.2014.00312.
- Majid, A. et al. "Differential coding of perception in the world's languages." *Proceedings of the National Academy of Sciences*, vol. 115, no. 45, 2018, pp. 11369–11376. doi:10.1073/pnas.1720419115
- Man, John. *The Gutenberg Revolution: How Printing Changed the Course of History*. Illustrated, Transworld Publishers, 2010.
- Mangen, Anne. "Hypertext Fiction Reading: Haptics and Immersion." *Journal of Research in Reading*, vol. 31, no. 4, 2008, pp. 404–19. *Crossref*, doi:10.1111/j.1467-9817.2008.00380.x.
- Mar, Raymond A., et al. "Emotion and Narrative Fiction: Interactive Influences before, during, and after Reading." *Cognition & Emotion*, vol. 25, no. 5, 2011, pp. 818–33. *Crossref*, doi:10.1080/02699931.2010.515151.
- McDonald, Daniel. G. "Narrative Research in Communication: Key Principles and Issues." *Review of Communication Research*, vol. 2, no. 1, 2014, pp. 115–132. doi:10.12840/issn.2255-4165.2014.02.01.005
- McGann, John P. "Poor Human Olfaction Is a 19<sup>th</sup>-Century Myth." *Science*, vol. 356, no. 6338, 2017, p. eaam7263. *Crossref*, doi:10.1126/science.aam7263.
- Muchembled, Robert, and Susan Pickford. *Smells: A Cultural History of Odours in Early Modern Times*. 1st ed., Polity, 2020.
- Olsson, Mats J., et al. "Odor Memory Performance and Memory Awareness: A Comparison to Word Memory Across Orienting Tasks and Retention Intervals." *Chemosensory Perception*, vol. 2, no. 3, 2009, pp. 161–71. *Crossref*, doi:10.1007/s12078-009-9051-7.
- Ou, Li-Chen, et al. "Universal Models of Colour Emotion and Colour Harmony." *Color Research & Application*, vol. 43, no. 5, 2018, pp. 736–48. *Crossref*, doi:10.1002/col.22243.
- Rubin, David C., et al. "Olfactory Cuing of Autobiographical Memory." *The American Journal of Psychology*, vol. 97, no. 4, 1984, p. 493. *Crossref*, doi:10.2307/1422158.
- Saive, Anne-Lise, et al. "A Review on the Neural Bases of Episodic Odor Memory: From Laboratory-Based to Autobiographical Approaches." *Frontiers in Behavioral Neuroscience* vol. 8 240. 7 July 2014, doi:10.3389/fnbeh.2014.00240.

- San Roque, Lila, et al. "Vision Verbs Dominate in Conversation across Cultures, but the Ranking of Non-Visual Verbs Varies." *Cognitive Linguistics*, vol. 26, no. 1, 2015, pp. 31–60. *Crossref*, doi:10.1515/cog-2014-0089.
- Schab, Frank R. "Odor Memory: Taking Stock." *Psychological Bulletin*, vol. 109, no. 2, 1991, pp. 242–51. *Crossref*, doi:10.1037/0033-2909.109.2.242.
- Schellekens, Elisabeth. "Taste and Objectivity: The Emergence of the Concept of the Aesthetic." *Philosophy Compass*, vol. 4, no. 5, 2009, pp. 734–43. *Crossref*, doi:10.1111/j.1747-9991.2009.00234.x.
- Schubert, Thomas W. "A New Conception of Spatial Presence: Once Again, with Feeling." *Communication Theory*, vol. 19, no. 2, 2009, pp. 161–87. *Crossref*, doi:10.1111/j.1468-2885.2009.01340.x.
- Smrekar Borut. "Ocenjujemo: Deseta hči." *Delo*, 17 May 2015. <https://old.delo.si/kultura/ocene/ocenjujemo-deseta-hci.html>. Accessed on 13 April 2021.
- Speidel, Klaus. "Can a Single Still Picture Tell a Story? Definitions of Narrative and the Alleged Problem of Time with Single Still Pictures." *Diegesis*, vol. 2, no. 1, 2013, pp. 173–194.
- Tate Sensorium, <https://www.tate.org.uk/whats-on/tate-britain/display/ik-prize-2015-tate-sensorium>. Accessed on 12 April 2021.
- Tulving, Endel. "Episodic Memory: From Mind to Brain." *Annual Review of Psychology*, vol. 53, no. 1, 2002, pp. 1–25. *Crossref*, doi:10.1146/annurev.psych.53.100901.135114.
- Visch, Valentijn T., et al. "The Emotional and Cognitive Effect of Immersion in Film Viewing." *Cognition & Emotion*, vol. 24, no. 8, 2010, pp. 1439–45. *Crossref*, doi:10.1080/02699930903498186.
- Wilms, Lisa, and Daniel Oberfeld. "Color and Emotion: Effects of Hue, Saturation, and Brightness." *Psychological Research*, vol. 82, no. 5, 2018, pp. 896–914. *Crossref*, doi:10.1007/s00426-017-0880-8.
- Wilson, Donald, and Richard Stevenson. *Learning to Smell: Olfactory Perception from Neurobiology to Behavior*. Johns Hopkins University Press, 2006.
- Winter, Bodo, et al. "Vision Dominates in Perceptual Language: English Sensory Vocabulary Is Optimised for Usage." *Cognition*, vol. 179, 2018, pp. 213–20. *Crossref*, doi:10.1016/j.cognition.2018.05.008.
- Yeshurun, Yaara, et al. "The Privileged Brain Representation of First Olfactory Associations." *Current Biology*, vol. 19, no. 21, 2009, pp. 1869–74. *Crossref*, doi:10.1016/j.cub.2009.09.066.
- Zajc, Ivana. "Prerok, gledališče za vse čute." *Primorski dnevnik*, 23 December 2018, p. 11.